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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) A method of converting a neural stem cell into a ventral neuron, which comprises introducing into the neural stem cell, ex vivo, a nucleic acid which expresses homeodomain transcription factor Nkx6.1 protein in the stem cell so as to thereby convert the neural stem cell into the ventral neuron.
2. (previously presented) The method of claim 1, wherein the nucleic acid introduced into the neural stem cell incorporates into the chromosomal DNA of the stem cell.
3. (original) The method of claim 1 wherein the nucleic acid is introduced by transfection or transduction.
4. (original) The method of claim 1 wherein the ventral neuron is a motor neuron, a V2 neuron, or a V3 neuron.
- 5-12. (canceled)